

ABSTRACT

An inventive method of making a rare-earth alloy powder is used to produce a rare-earth sintered magnet, whose main phase has a composition $R_2T_{14}A$ (where R is one of the rare-earth elements including Y; T is Fe with or without a non-Fe transition metal; and A is boron with or without carbon). The method includes the steps of: preparing a first rare-earth rapidly solidified alloy, having a columnar texture with an average dendritic width within a first range, by subjecting a melt of a first rare-earth alloy with a first composition to a rapid cooling process; preparing a second rare-earth rapidly solidified alloy, having a columnar texture with an average dendritic width smaller than that of the first rare-earth rapidly solidified alloy and falling within a second range, by subjecting a melt of a second rare-earth alloy with a second composition to the rapid cooling process; making a first rare-earth alloy powder by pulverizing the first solidified alloy; making a second rare-earth alloy powder by pulverizing the second solidified alloy; and making a powder blend including the first and second rare-earth alloy powders.